ATTACHMENT J3

Vance AFB Water Distribution System

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J3.1 Vance AFB Overview

Vance AFB, located three miles south-southwest of Enid in Garfield County, Oklahoma, is an Air Education and Training Command (AETC) installation that conducts joint specialized undergraduate pilot training (JSUPT). The Installation is essentially a single-mission base with the primary organization, the 71st Flying Training Wing (71st FTW), graduating about 250 pilots from its pilot training program each year. T-37, T-38, and T-1 aircraft are assigned to the 71st FTW.

Vance AFB occupies 2,000 acres. Recent land acquisitions include 130 acres on the north side of installation given to the Installation by the City of Enid in 1999 and another 10 acres given by the City of Enid in 2001. Vance AFB has a total population of approximately 3,500, including military personnel, civilian employees and support personnel, students, and dependents. Facility space totals approximately 1.94 million square feet (msf) (Industrial: 1.19 msf; Administrative: 0.20 msf; Military Family Housing (MFH): 0.38 msf; Unaccompanied Housing: 0.16 msf; Transient Quarters: .01 msf). The annual payroll at Vance AFB is approximately $65 million (combined military, civilian, and retirees), and the Base is vital to the local economy through civilian employment, contracting, and purchases from local businesses.

There are no known factors that would effect any significant changes in total Vance building space and the consequent impact on Vance utility requirements.

Kegelman Auxiliary Airfield is a small training airfield, about 45 miles northwest of Vance AFB and west of Oklahoma Highway 38, that covers 1,076 acres with only nine buildings totaling approximately 8,135 square feet of industrial/administrative space.

J3.2 Water Distribution System Description

J3.2.1 Water Distribution System Fixed Equipment Inventory

The Vance AFB water distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation and Government ownership currently starts to the point of demarcation, defined by the Right of Way. The system may include, but is not limited to, pipelines, valves, fire hydrants, storage facilities, exterior backflow devices, pumps, and meters. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor's proposal shall be based on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

Specifically excluded from the water distribution system privatization package:

- Non-potable water fire protection system, including deluge tanks.
- Irrigation systems.
- Potable water system within the Military Family Housing area.

J3.2.1.1 Description

The City of Enid, Oklahoma supplies potable water to Vance AFB for domestic, industrial, and irrigation use. The City of Enid's source is groundwater. It is treated and supplied to the Base through a dedicated booster pumping station and a 10-inch line from the pumping station to a City-owned master meter located west of Industrial Gate at 60 pounds per square inch gauge (psig).

The water flows from the City's meter via a 10-inch, AF-owned water line to a 300,000-gallon ground storage tank and a 500,000-gallon, 110-foot elevated storage tank. Near the ground storage tank is an automated booster pumping station that moves water to the elevated tank. Both the elevated and ground storage tanks include impressed current cathodic protection systems that include an interior array of suspended anodes. (The tanks are the only components of the potable water system that are cathodically protected.)

The Main Base water system was constructed in 1942 and is primarily comprised of ductile iron pipe. Water main sizes range from 2 inches to 10 inches in diameter. Average depth of burial is 36 inches.

Vance AFB has a small water system at Kegelman Auxiliary Airfield, a small training area about 30 miles northwest of Vance AFB, west of Oklahoma Highway 38. The water system consists of a Corps of Engineers' well approximately 150 feet east of Highway 38. From the well, a small water line crosses under Highway 38 and feeds the fire station. (This Vance-owned water line at Kegelman will be excluded from the privatization package.)

J3.2.1.2 Inventory

Table 1 lists major components of the Vance AFB water distribution system included in the sale. Drawings used to develop the inventory were the Vance Comprehensive Plan Tab G-1, Sheet 1 (2001) and Water Storage Plan PD-1876, Sheet 3 (May 1998). A list of the existing utility meters for the potable water system was provided by the Installation and was also used in the development of the inventory components.

TABLE 1
Fixed Inventory
Water Distribution System - Vance AFB

Component	Size	Unit	Quantity	Approximate Year of Construction
Pipe				
DI Pipe	2″	LF	7,445	1942
DI Pipe	2½″	LF	1,058	1942
DI Pipe	3″	LF	4,364	1942
DI Pipe	4″	LF	788	1942
DI Pipe	6″	LF	13,573	1942

Component	Size	Unit	Quantity	Approximate Year of Construction
DI Pipe	8″	LF	13,803	1942
DI Pipe	10″	LF	11,475	1942
Storage Tanks				
Elevated Tank	500KGal	EA	1	1943
Ground Storage Tank	300KGal	EA	1	1960
Cathodic Protection, Magnesium Anode	9#	EA	2	1990
Cathodic Protection, Reference Cell		EA	2	1990
Cathodic Protection, Rectifier	28V/10A	EA	2	1990
Cathodic Protection, Cable	#2	LF	1,000	1990
Cathodic Protection, Test Station		EA	2	1990
Fire Hydrants				
Fire Hydrant		EA	94	1987
Valves				
Gate Valve w/ Box	2″	EA	90	1942
Gate Valve w/ Box	2½″	EA	7	1942
Gate Valve w/ Box	3″	EA	21	1942
Gate Valve w/ Box	4″	EA	7	1942
Gate Valve w/ Box	6″	EA	39	1942
Gate Valve w/ Box	8″	EA	27	1942
Gate Valve w/ Box	10″	EA	12	1942
Main Base Water Service				
DI Pipe	4″	LF	10,000	1942
Gate Valve w/ Box	4″	EA	100	1942
Booster Station				1942
Building		SF	500	1942
Pump Station (2-30HP)		HP	60	1999
Altitude Control Valve	8″	EA	1	1999
Water Meter		EA	2	1980

Notes:
DI = ductile iron AC = asbestos cement
LF = linear feet EA = each
SF = square feet HP = horsepower
KGal = thousand gallons

J3.2.2 Water Distribution System Non-Fixed Equipment and Specialized Tools

Tables 2 and **3** would typically list other ancillary equipment (spare parts) and specialized vehicles and tools included in the purchase. However, Vance is a very small installation with a small, contracted O&M operation. The Installation does not maintain significant levels of spares (they are actually prohibited from maintaining such levels), nor is there specialized equipment that could be made available for privatization. Hence, **Tables 2** and **3** reflect no items available for privatization.

TABLE 2
Spare Parts
Water Distribution System - Vance AFB

Quantity	Item	Make/Model	Description	Remarks
None				

TABLE 3
Specialized Vehicles and Tools
Water Distribution System - Vance AFB

Description	Quantity	Location	Maker
None			

J3.2.3 Water Distribution System Manuals, Drawings, and Records

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4
Manuals, Drawings, and Records
Water Distribution System - Vance AFB

Quantity	Item	Description	Remarks
1	Drawing	Comprehensive Plan, Tab G-1, 2001	Sheet 1 of 1
1	Drawing	Cathodic Protection System, 1998	Sheet 1 of 1
1	Drawing	Water Storage Plan (PD-1876), 1998	Sheet 1 of 1
1	Listing	Hydrant Flow Chart	Location/Pressure/Flow Rate
1	Report	Consumer Confidence Report	Provided by City of Enid

J3.3 Specific Service Requirements

The service requirements for the Vance AFB water distribution system are as defined in the Section C, *Description/Specifications/Work Statement*.

There are no special/more restrictive service requirements than those listed in Section C.

J3.4 Current Service Arrangement

- Provider Name: City of Enid, Oklahoma
- Average Usage: Average annual water consumption is approximately 75,000 KGals
- Annual Usage Fluctuations: Annual Usage Fluctuations have been relatively insignificant. Annual and monthly fluctuations are driven primarily by rainfall and the consequent demand for irrigation. August is usually the peak month with total consumption averaging 10,000 KGals. At the low end, winter and spring month consumption averages between 4,000 and 5,000 KGals.
- A former DODS school, turned over to the local school district several years ago, is connected to the Vance water distribution system. Billing for the water is handled directly by the City of Enid with billed quantities subtracted from the master-metered Vance AFB bill. There are no other known special service agreements or commitments.

J3.5 Secondary Metering

J3.5.1 Existing Secondary Meters

Table 5 provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3.3 and J3.6 below.

TABLE 5
Existing Secondary Meters
Water Distribution System - Vance AFB

Bldg No.	Facility Function	Square Feet
410	Commissary	33,300
415	BX Complex	34,900

J3.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3.3 and J3.6 below.

TABLE 6
New Secondary Meters
Water Distribution System - Vance AFB

Meter Location	Meter Description
Note: The Installation has identified no new, specific secondary meter requirements. Water usage by other reimbursing customers is minimal. Estimated usage is apparently a satisfactory arrangement with the customers and the Installation.	

J3.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. **Invoice** (IAW G.2)**:** The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

Name: Rick Boggs
71 FTS/LS/CE
Address: 320 Young Road
Vance AFB, OK 73705
Phone number: (580) 213-7071

2. **Outage Report:** The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

Name: Rick Boggs
71 FTS/LS/CE
Address: 320 Young Road
Vance AFB, OK 73705
Phone number: (580) 213-7071

3. **Meter Reading Report:** The monthly meter reading report shall show the current and previous month readings for all identified secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

Name: Rick Boggs
71 FTS/LS/CE
Address: 320 Young Road
Vance AFB, OK 73705
Phone number: (580) 213-7071

4. **System Efficiency Report:** If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to:

Name: Rick Boggs
71 FTS/LS/CE
Address: 320 Young Road
Vance AFB, OK 73705
Phone number: (580) 213-7071

J3.7 Water Conservation Projects

IAW Paragraph C.3, Requirement, there are currently no water conservation efforts or projects that would require continuation after privatization.

J3.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Vance AFB boundaries.

J3.9 Off-Installation Sites

Although the Kegelman off-base site has been considered, there is only one 1,000-foot section of 2-inch water line that could potentially be privatized. Because of the distance of this one small component from Vance AFB proper, that section of pipe has been excluded from the privatization package.

J3.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** provides a listing of service connections and disconnections required upon transfer.

TABLE 7
Service Connections and Disconnections
Water Distribution System - Vance AFB

Location	Description
None	

J3.11 Government Recognized System Deficiencies

Table 8 provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the Vance AFB water distribution system. If the utility system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AB.

TABLE 8
System Deficiencies
Water Distribution System - Vance AFB

Project Location	Project Description
Main Base Area	*Project XTLF 880017 – Repair Base Water Valves & Mains*. Includes replacement of approximately 5,500 feet of 10-inch, and 1,200 feet of 8-inch water lines, eight 10-inch, and four 8-inch valves and boxes.